Year 3 Term 1- Knowledge and Skills

Curriculum Intent	*Attain an appreciation for literature, art, music within the breadth of the National Curriculum.*
Power of Reading Text	Traction Man Meets Turbo Dog Milo
Cornerstones Unit	Urban Pioneers
Companion project	What are flowers for?

	Knowledge	Skills
Science	• Light from the Sun is damaging for vision and the skin. Protection from the Sun includes sun cream, sun hats, sunglasses and staying indoors or in the shade. • Shadows change shape and size when the light source moves. For example, when the light source is high above the object, the shadow is short and when the light source is low down, the object's shadow is long. • A shadow is formed when light from a light source, such as the Sun, is blocked by an object. Opaque objects cast dark shadows. Translucent objects cast pale shadows. Transparent objects cast very pale shadows. • Dark is the absence of light and we need light to be able to see. • Data can be recorded and displayed in different ways, including tables, charts, graphs and labelled diagrams. Data can be used to provide evidence to answer questions. • Questions can help us find out about the world and can be answered in different ways. • Tests can be set up and carried out by following or planning a set of instructions. A prediction is a best guess for what might happen in an investigation based on some prior knowledge. • Light can be reflected from different surfaces. Some surfaces are poor reflectors, such as some fabrics, while other surfaces are good reflectors, such as mirrors. • Water is transported in plants from the roots, through the stem and to the leaves, through tiny tubes called xylem. • The plant's roots anchor the plant in the ground and transport water and minerals from the ground to the plant. The stem (or trunk) support the plant above the ground. The leaves collect energy from the Sun and make food for the plant. Flowers make seeds to produce new plants. • Plants need air, light, water, minerals from the soil and room to grow, in order to survive. Different plants have different needs depending on their habitat. Examples include cacti, which need less water than is typical, and ferns, which can grow in lower light levels. • Flowers are important in the life cycle of flowering plants. The processes of a plant's life cycle include germination, flower production, pollination, seed formation and seed dispersal. Insects and the wind can transfer pollen from one plant to another (pollination). Animals, wind, water and explosions can disperse seeds away from the parent plant (seed dispersal).	• Explain why light from the Sun can be dangerous. • Find patterns in the way shadows change during the day. • Explain, using words or diagrams, how shadows are formed when a light source is blocked by an opaque object. • Describe the differences between dark and light and how we need light to be able to see. • Gather and record findings in a variety of ways (diagrams, tables, charts and graphs) with increasing accuracy. • Ask questions about the world around them and explain that they can be answered in different ways. • Set up and carry out some simple, comparative and fair tests, making predictions for what might happen. • Group and sort materials as being reflective or non-reflective. • Investigate how water is transported within plants. • Name and describe the functions of the different parts of flowering plants (roots, stem, leaves and flowers). • Describe the requirements of plants for life and growth (air, light, water, nutrients and room to grow) and how they vary from plant to plant. • Draw and label the life cycle of a flowering plant.
Geography	• Services include banks, post offices, hospitals, public transport and garages. Land use types include leisure, housing, industry, transport and agriculture. • Different types of settlement include rural, urban, hamlet, town, village, city and suburban areas. A city is a large settlement where many people live and work. Residential areas surrounding cities are called suburbs. • Maps, globes and digital mapping tools can help to locate and describe significant geographical features. • Primary data includes information gathered by observation and investigation. • The term geographical evidence relates to facts, information and numerical data. • A four-figure grid reference contains four numbers. The first two numbers are called the easting and are found along the top and bottom of a map. The second two numbers are called the northing and are found up both sides of a map. Four-figure grid references give specific information about locations on a map. • Geographical features created by nature are called physical features. Physical features include beaches, cliffs and mountains. Geographical features created by humans are called human features. Human features include houses, factories and train stations.	• Describe the type, purpose and use of different buildings, monuments, services and land, and identify reasons for their location. • Describe the type and characteristics of settlement or land use in an area or region. • Analyse maps, atlases and globes, including digital mapping, to locate countries and describe features studied. • Analyse primary data, identifying any patterns observed. • Gather evidence to answer a geographical question or enquiry. • Use four-figure grid references to describe the location of objects and places on a simple map. • Classify, compare and contrast different types of geographical feature.
History	• Historical information can be presented as a narrative, non-chronological report, fact file, timeline, description, reconstruction or presentation. • Interviews, diaries, letters, journals, speeches, autobiographies, artefacts, photographs and witness statements are historical source materials. However, some historical source materials are more reliable than others. • Historical viewpoints demonstrate what a person thinks and feels about a historical event or person. Primary sources include documents or artefacts created by a witness to a historical event at the time it happened. Secondary sources were created by someone who did not experience or participate in the event. A secondary source interprets and analyses a primary source. • National and international historical events, such as wars, invasions, disease, the invention of new technologies and changes in leadership, can have a positive or negative impact on a locality and can shape the beliefs, identity, settlement and culture of people in the locality. • Dates and events can be sequenced on a timeline using AD or BC. AD dates become larger the closer they get to the present day. BC dates become larger the further away they get from the present day. The year AD 1 marks the birth of Christ in the Gregorian calendar.	• Make choices about the best ways to present historical accounts and information. • Make deductions and draw conclusions about the reliability of a historical source or artefact. • Identify and discuss different viewpoints in a range of historical materials and primary and secondary sources. • Analyse a range of historical information to explain how a national or international event has impacted the locality. • Sequence dates and information from several historical periods on a timeline.
Computing	• Images and data should not be shared online without the permission of the owner. Personal information, such as full name, age, school and address, should not be shared online. • As with face to face communication, online communication should be done respectfully and responsibly, considering the impact on others. • Sequencing instructions is the step-by-step process that robots or other devices follow to achieve specific outcomes. This can be a single algorithm or series of algorithms called a program. • Text, images, animation, audio and video clips can be combined using tools within a piece of software or by using a range of software. For example, an image could be inserted into a word processing document or a video could be inserted into a presentation. • Repetitions or loops can be used in programming where a computer will continue to run part of a program a number of times or until a condition is met, using the term 'repeat... until'. The given feedback can be used to identify and correct any mistakes in the program. • When work is saved, it is stored on a storage device, such as the computer's hard drive, a	• Describe simple rules for sharing images and data safely. • Compose clear and appropriate messages in online communities. • Design, write and enter a sequence of instructions using a robot or other device to achieve specific outcomes, debugging if necessary. • Combine a range of text, images, animation and audio and video clips for given purIdentify and use repetitions or loops in a program sequence, predicting outcomes and noticing and correcting any mistakes.poses. • Recognise that saved work can be retrieved from another device on the same network. • Use familiar computer hardware to successfully complete a task. • Use a range of different software to successfully complete a project. • Use appropriate tools (software, websites and apps) to collaborate and communicate safely online.

	USB flash drive, a shared server or online. This work can then be retrieved from another device (except if it is saved on the computer's hard drive). • Several pieces of hardware can be used together to complete one task, such as using a camera to take a photograph, uploading it to a computer and then printing it using a printer. • Several pieces of software can be used together to complete one task, such as adding a video to a word processed document. • Different software, websites and apps can be used to collaborate and communicate online. Each one has different terms and conditions that need to be followed to stay safe, such as age restrictions. • Digital technology can be used for a range of purposes in different settings, such as using a tablet in the classroom to access educational material, in the home to access entertainment and in the community to share local news.	• Use digital technology in different ways in the classroom, home and community.
Design and Technology	• Asking questions can help others to evaluate their products, such as asking them whether the selected materials achieved the purpose of the model. • Materials for a specific task must be selected on the basis of their properties. These include physical properties as well as availability and cost.	• Suggest improvements to their products and describe how to implement them, beginning to take the views of others into account. • Plan which materials will be needed for a task and explain why.
Art and Design	• Visual elements include colour, line, shape, form, pattern and tone. • Preliminary sketches are quick drawings that can be used to inspire a final piece of artwork. They are often line drawings that are done in pencil. • Suggestions for improving or adapting artwork could include aspects of the subject matter, structure and composition; the execution of specific techniques or the uses of colour, line, texture, tone, shadow and shading. • Hatching, cross-hatching and shading are techniques artists use to add texture and form. • An urban landscape is a piece of artwork that shows a view of a town or city. • Explorations of the similarities and differences between pieces of art, structures and products from the same genre could focus on the subject matter, the techniques and materials used or the ideas and concepts that have been explored or developed. • The work of significant artists, architects, cultures and designers has distinctive features, including the subject matter that inspires them, the movement to which they belong and the techniques and materials they have used.	• Use and combine a range of visual elements in artwork. • Use preliminary sketches in a sketchbook to communicate an idea or experiment with a technique. • Make suggestions for ways to adapt and improve a piece of artwork. • Add tone to a drawing by using linear and cross-hatching, scumbling and stippling. • Draw, collage, paint or photograph an urban landscape. • Compare artists, architects and designers and identify significant characteristics of the same style of artwork, structures and products through time. • Work in the style of a significant artist, architect, culture or designer.

Year 3 Term 2- Knowledge and Skills

Curriculum Intent	*Appreciate the benefits of diversity by understanding own and other's cultures and traditions.*
Power of Reading Text	One Plastic Bag Christmas week - It's a No-Money Day
Cornerstones Unit	Heros and Villains
Companion project	-

	Knowledge	Skills
Science		
Geography		
History	• Historical information can be presented as a narrative, non-chronological report, fact file, timeline, description, reconstruction or presentation. • Historically valid questions relate to aspects, such as significance; time and chronology; continuity and change; comparing and contrasting or cause and consequence.	• Make choices about the best ways to present historical accounts and information. • Devise or respond to historically valid questions about a significant historical figure and suggest or plan ways to answer them.
Computing	• Several pieces of hardware can be used together to complete one task, such as using a camera to take a photograph, uploading it to a computer and then printing it using a printer. • Several pieces of software can be used together to complete one task, such as adding a video to a word processed document. • Digital technology can be used for a range of purposes in different settings, such as using a tablet in the classroom to access educational material, in the home to access entertainment and in the community to share local news.	• Use familiar computer hardware to successfully complete a task. • Use a range of different software to successfully complete a project. • Use digital technology in different ways in the classroom, home and community.
Design and Technology	• Design criteria are the exact goals a project must achieve to be successful. These criteria might include the product's use, appearance, cost and target user. • Specific tools can be used for cutting, such as saws. Wood can be joined using glue, nails, staples, or a combination of these. Safety rules must be followed to prevent injury from sharp blades. These rules include using a bench hook to keep the wood still, using a junior hacksaw with a pistol grip and working under adult supervision. • Materials for a specific task must be selected on the basis of their properties. These include physical properties as well as availability and cost.	• Develop design criteria to inform a design. • Use tools safely for cutting and joining materials and components. • Plan which materials will be needed for a task and explain why.
Art and Design	• Artists draw, paint or sculpt human forms in active poses. • Suggestions for improving or adapting artwork could include aspects of the subject matter, structure and composition; the execution of specific techniques or the uses of colour, line, texture, tone, shadow and shading. • Malleable materials, such as clay, papier-mâché and Modroc, are easy to change into a new shape. Rigid materials, such as cardboard, wood or plastic, are more difficult to change into a new shape and may need to be cut and joined together using a variety of techniques. • Explorations of the similarities and differences between pieces of art, structures and products from the same genre could focus on the subject matter, the techniques and materials used or the ideas and concepts that have been explored or developed.	• Draw, paint or sculpt a human figure in a variety of poses, using a range of materials, such as pencil, charcoal, paint and clay. • Make suggestions for ways to adapt and improve a piece of artwork. • Create a 3-D form using malleable or rigid materials, or a combination of materials. • Compare artists, architects and designers and identify significant characteristics of the same style of artwork, structures and products through time.

Year 3 Term 3 - Knowledge and Skills

Curriculum Intent	*Attain an appreciation for literature, art, music within the breadth of the National Curriculum.*
Power of Reading Text	Jelly Boot, Smelly Boots
Cornerstones Unit	Spirit
Companion project	What do owls eat?

	Knowledge	Skills
Science	• Humans have a skeleton and muscles for movement, support and protecting organs. Major bones in the human body include the skull, ribs, spine, humerus, ulna, radius, pelvis, femur, tibia and fibula. Major muscle groups in the human body include the biceps, triceps, abdominals, trapezius, gluteals, hamstrings, quadriceps, deltoids, gastrocnemius, latissimus dorsi and pectorals. • Humans have to get nutrition from what they eat. It is important to have a balanced diet made up of the main food groups, including proteins, carbohydrates, fruit and vegetables, dairy products and alternatives, and fats and spreads. Humans need to stay hydrated by drinking water. • Data can be recorded and displayed in different ways, including tables, charts, graphs and labelled diagrams. Data can be used to provide evidence to answer questions. • Equipment is used to take measurements in standard units. Examples include data loggers plus sensors, timers (seconds, minutes and hours), thermometers (°C) and metre sticks (millimetres, centimetres and metres). Taking repeat readings can increase the accuracy of the measurement.	• Describe how humans need the skeleton and muscles for support, protection and movement. • Explain the importance and characteristics of a healthy, balanced diet. • Gather and record findings in a variety of ways (diagrams, tables, charts and graphs) with increasing accuracy. • Take measurements in standard units, using a range of simple equipment.
Geography	• Maps, globes and digital mapping tools can help to locate and describe significant geographical features.	• Analyse maps, atlases and globes, including digital mapping, to locate countries and describe features studied.
History	• The lives of people in the Stone Age, Bronze Age and Iron Age changed and developed over time due to the discovery and use of the materials stone, bronze and iron. These developments made it easier for people to farm, create permanent settlements and protect their land. • Human invention and ingenuity have changed the living conditions, health, safety, quality of life and cultural experiences of people over time and throughout the world. Examples include the development of tools, the discovery of antibiotics, the writing of Shakespeare and the Industrial Revolution. • The achievements and influences of the ancient Greeks on the wider world include the English alphabet and language; democracy, including trial by jury; sport and the Olympic Games; the subjects of mathematics, science, philosophy, art, architecture and theatre.	• Describe how past civilisations or lives of people in Britain developed during the Stone Age, Bronze Age and Iron Age. • Describe ways in which human invention and ingenuity have changed how people live. • Describe the achievements and influence of the ancient Greeks on the wider world.
Computing	• Digital technology can be used for a range of purposes in different settings, such as using a tablet in the classroom to access educational material, in the home to access entertainment and in the community to share local news.	• Use digital technology in different ways in the classroom, home and community.
Design and Technology		
Art and Design		

Year 3 Term 4- Knowledge and Skills

Curriculum Intent	*Sustain and improve the environment, locally and globally.*
Power of Reading Text	The Mousehole Cat
Cornerstones Unit	Flow
Companion project	What is soil?

	Knowledge	Skills
Science	• Soils are made from tiny pieces of eroded rock, air and organic matter. There are a variety of naturally occurring soils, including clay, sand and silt. Different areas have different soil types. • Results are information that has been discovered as part of an investigation. A conclusion is the answer to a question that uses the evidence collected. • Data can be recorded and displayed in different ways, including tables, charts, graphs and labelled diagrams. Data can be used to provide evidence to answer questions. • Questions can help us find out about the world and can be answered in different ways. • Equipment is used to take measurements in standard units. Examples include data loggers plus sensors, timers (seconds, minutes and hours), thermometers (°C) and metre sticks (millimetres, centimetres and metres). Taking repeat readings can increase the accuracy of the measurement. • Tests can be set up and carried out by following or planning a set of instructions. A prediction is a best guess for what might happen in an investigation based on some prior knowledge. • An observation involves looking closely at objects, materials and living things, which can be compared and grouped according to their features. • There are three different rock types: sedimentary, igneous and metamorphic. Sedimentary rocks form from mud, sand and particles that have been squashed together over a long time to form rock. Examples include sandstone and limestone. Igneous rocks are made from cooled magma or lava. They usually contain visible crystals. Examples include pumice and granite. Metamorphic rocks are formed when existing rocks are heated by the magma under the Earth's crust or squashed by the movement of the Earth's tectonic plates. They are usually very hard. Examples include slate and marble. • Some materials have magnetic properties. Magnetic materials are attracted to magnets. All magnetic materials are metals but not all metals are magnetic. Iron is a magnetic metal. • Water is transported in plants from the roots, through the stem and to the leaves, through tiny tubes called xylem. • The plant's roots anchor the plant in the ground and transport water and minerals from the ground to the plant. The stem (or trunk) support the plant above the ground. The leaves collect energy from the Sun and make food for the plant. Flowers make seeds to produce new plants.	• Investigate soils from the local environment, making comparisons and identifying features. • Use suitable vocabulary to talk or write about what they have done, what the purpose was and, with help, draw a simple conclusion based on evidence collected, beginning to identify next steps or improvements. • Gather and record findings in a variety of ways (diagrams, tables, charts and graphs) with increasing accuracy. • Ask questions about the world around them and explain that they can be answered in different ways. • Take measurements in standard units, using a range of simple equipment. • Set up and carry out some simple, comparative and fair tests, making predictions for what might happen. • Make increasingly careful observations, identifying similarities, differences and changes and making simple connections. • Compare and group rocks based on their appearance, properties or uses. • Compare and group materials based on their magnetic properties. • Investigate how water is transported within plants. • Name and describe the functions of the different parts of flowering plants (roots, stem, leaves and flowers).
Geography	• Services include banks, post offices, hospitals, public transport and garages. Land use types include leisure, housing, industry, transport and agriculture. • Maps, globes and digital mapping tools can help to locate and describe significant geographical features. • Primary data includes information gathered by observation and investigation. • The term geographical evidence relates to facts, information and numerical data. • Latitude is the distance north or south of the equator and longitude is the distance east or west of the Prime Meridian. • A four-figure grid reference contains four numbers. The first two numbers are called the easting and are found along the top and bottom of a map. The second two numbers are called the northing and are found up both sides of a map. Four-figure grid references give specific information about locations on a map.	• Describe the type, purpose and use of different buildings, monuments, services and land, and identify reasons for their location. • Analyse maps, atlases and globes, including digital mapping, to locate countries and describe features studied. • Analyse primary data, identifying any patterns observed. • Gather evidence to answer a geographical question or enquiry. • Locate significant places using latitude and longitude. • Use four-figure grid references to describe the location of objects and places on a simple map.
History	• The lives of people in the Stone Age, Bronze Age and Iron Age changed and developed over time due to the discovery and use of the materials stone, bronze and iron. These developments made it easier for people to farm, create permanent settlements and protect their land. • Human invention and ingenuity have changed the living conditions, health, safety, quality of life and cultural experiences of people over time and throughout the world. Examples include the development of tools, the discovery of antibiotics, the writing of Shakespeare and the Industrial Revolution. • The achievements and influences of the ancient Greeks on the wider world include the English alphabet and language; democracy, including trial by jury; sport and the Olympic Games; the subjects of mathematics, science, philosophy, art, architecture and theatre.	• Describe how past civilisations or lives of people in Britain developed during the Stone Age, Bronze Age and Iron Age. • Describe ways in which human invention and ingenuity have changed how people live. • Describe the achievements and influence of the ancient Greeks on the wider world.
Computing	• Advantages of communicating electronically are that it is available at any time, instant and global. Disadvantages include easier misunderstandings, people pretending to be someone they are not, lack of privacy (once something is published online, it cannot be removed) and a threat to personal safety (access to personal information). Concerns should be reported to a trusted adult. • As with face to face communication, online communication should be done respectfully and responsibly, considering the impact on others. • Text, images, animation, audio and video clips can be combined using tools within a piece of software or by using a range of software. For example, an image could be inserted into a word processing document or a video could be inserted into a presentation. • Several pieces of software can be used together to complete one task, such as adding a video to a word processed document. • Different software, websites and apps can be used to collaborate and communicate online. Each one has different terms and conditions that need to be followed to stay safe, such as age restrictions. • Digital technology can be used for a range of purposes in different settings, such as using a tablet in the classroom to access educational material, in the home to access entertainment and in the community to share local news. • The World Wide Web is a collection of web pages that are run via the internet. The information requested can be displayed as text, images or videos.	• Explain the advantages and disadvantages of communicating electronically and strategies for preventing issues. • Compose clear and appropriate messages in online communities. • Combine a range of text, images, animation and audio and video clips for given purposes. • Use a range of different software to successfully complete a project. • Use appropriate tools (software, websites and apps) to collaborate and communicate safely online. • Use digital technology in different ways in the classroom, home and community. • Explain that the World Wide Web contains lots of web pages about different subjects that can be searched.
Design and Technology	• Levers consist of a rigid bar that rotates around a fixed point, called a fulcrum. They reduce the amount of work needed to lift a heavy object. Sliders move from side to side or up and down, and are often used to make moving parts in books. Axles are shafts on which wheels can rotate to make a moving vehicle. Cams are devices that can convert circular motion into up-and-down motion. • Shell structures are hollow, 3-D structures with a thin outer covering, such as a box. Frame structures are made from thin, rigid components, such as a tent frame. The rigid frame gives the structure shape and support. Diagonal struts can strengthen the structure. • Asking questions can help others to evaluate their products, such as asking them whether the selected materials achieved the purpose of the model. • Materials for a specific task must be selected on the basis of their properties. These include physical properties as well as availability and cost.	• Explore and use a range of mechanisms (levers, sliders, axles, wheels and cams) in models or products. • Create shell or frame structures using diagonal struts to strengthen them. • Suggest improvements to their products and describe how to implement them, beginning to take the views of others into account. • Plan which materials will be needed for a task and explain why.
Art and Design	• Visual elements include colour, line, shape, form, pattern and tone. • Examples of contrasting colours include red and green, blue and orange, and yellow and purple (violet). They are obviously different to one another and are opposite each other on the colour wheel.	• Use and combine a range of visual elements in artwork. • Identify, mix and use contrasting coloured paints.

Year 3 Term 5 - Knowledge and Skills

Curriculum Intent	*Appreciate the benefits of diversity by understanding own and other's cultures and traditions.*
Power of Reading Text	Saving the Butterfly
Cornerstones Unit	Through the Ages
Companion project	How do fossils form?

	Knowledge	Skills
Science	• Fossils form over millions of years and are the remains of a once-living organism, preserved as rock. Scientists can use fossils to find out what life on Earth was like in prehistoric times. Fossils form when a living thing dies in a watery environment. The body gets covered by mud and sand and the soft tissues rot away. Over time, the ground hardens to form sedimentary rock and the skeletal or shell remains turn to rock. • Results are information that has been discovered as part of an investigation. A conclusion is the answer to a question that uses the evidence collected. • Tests can be set up and carried out by following or planning a set of instructions. A prediction is a best guess for what might happen in an investigation based on some prior knowledge. • There are three different rock types: sedimentary, igneous and metamorphic. Sedimentary rocks form from mud, sand and particles that have been squashed together over a long time to form rock. Examples include sandstone and limestone. Igneous rocks are made from cooled magma or lava. They usually contain visible crystals. Examples include pumice and granite. Metamorphic rocks are formed when existing rocks are heated by the magma under the Earth's crust or squashed by the movement of the Earth's tectonic plates. They are usually very hard. Examples include slate and marble. • Some materials have magnetic properties. Magnetic materials are attracted to magnets. All magnetic materials are metals but not all metals are magnetic. Iron is a magnetic metal.	• Describe simply how fossils are formed, using words, pictures or a model. • Use suitable vocabulary to talk or write about what they have done, what the purpose was and, with help, draw a simple conclusion based on evidence collected, beginning to identify next steps or improvements. • Set up and carry out some simple, comparative and fair tests, making predictions for what might happen. • Compare and group rocks based on their appearance, properties or uses. • Compare and group materials based on their magnetic properties.
Geography	• Services include banks, post offices, hospitals, public transport and garages. Land use types include leisure, housing, industry, transport and agriculture. • Maps, globes and digital mapping tools can help to locate and describe significant geographical features. • There are three main types of rock found in the Earth's crust. They are sedimentary, igneous and metamorphic. Sedimentary rocks are made from sediment that settles in water and becomes squashed over a long time to form rock. They are often soft, permeable, have layers and may contain fossils. Igneous rocks are made from cooled magma or lava. They are usually hard, shiny and contain visible crystals. Metamorphic rocks are formed when existing rocks are heated by the magma under the Earth's crust or squashed by the movement of the Earth's tectonic plates. They are usually very hard and often shiny.	• Describe the type, purpose and use of different buildings, monuments, services and land, and identify reasons for their location. • Analyse maps, atlases and globes, including digital mapping, to locate countries and describe features studied. • Name and describe the types, appearance and properties of rocks.
History	• Stone Age life is defined by the use of stone for making tools and weapons and the transition from the hunter-gatherer lifestyle to farming. Bronze Age life is defined by the use of metals, including bronze, to make tools, weapons and objects, and the creation of large settlements and social hierarchy. Iron Age life is defined by the use of metals, including iron, to make stronger, more effective tools and weapons and fine, decorative objects. Farming became more efficient and religion was an important part of life. • Tribal communities appeared around 4000 years ago in Britain and supplanted the hunter-gatherer lifestyle. Communities created permanent settlements made up of a number of families, farmed to produce food, made and used pottery, developed tools and weapons and created burial mounds and monuments. • The lives of people in the Stone Age, Bronze Age and Iron Age changed and developed over time due to the discovery and use of the materials stone, bronze and iron. These developments made it easier for people to farm, create permanent settlements and protect their land. • Human invention and ingenuity have changed the living conditions, health, safety, quality of life and cultural experiences of people over time and throughout the world. Examples include the development of tools, the discovery of antibiotics, the writing of Shakespeare and the Industrial Revolution. • The achievements and influences of the ancient Greeks on the wider world include the English alphabet and language; democracy, including trial by jury; sport and the Olympic Games; the subjects of mathematics, science, philosophy, art, architecture and theatre. • Historical information can be presented as a narrative, non-chronological report, fact file, timeline, description, reconstruction or presentation. • Historical terms to describe periods of time include decade, century, millennia, era, AD, CE, BC and BCE. • Interviews, diaries, letters, journals, speeches, autobiographies, artefacts, photographs and witness statements are historical source materials. However, some historical source materials are more reliable than others. • Historical viewpoints demonstrate what a person thinks and feels about a historical event or person. Primary sources include documents or artefacts created by a witness to a historical event at the time it happened. Secondary sources were created by someone who did not experience or participate in the event. A secondary source interprets and analyses a primary source. • Throughout history, common areas of human concern include the need for food, survival, shelter and warmth; the accumulation of power and wealth and the development of technology. • The causes of a significant event are the things that make the event happen and directly lead up to the event. The consequences of a significant event happen after the event and can be short-term, such as people being killed in a battle, or long-term, such as the change in language and society after an invasion. • Aspects of history that can change over time include rule and government, jobs, health, art and culture, everyday life and technology. • Significant events or people in the past have caused great change over time. They have influenced how people live today because they have formed countries and boundaries; created buildings and objects that are still used today; helped to improve health, knowledge and understanding through scientific research and discovery and provided inspiration for the way people should live. • Dates and events can be sequenced on a timeline using AD or BC. AD dates become larger the closer they get to the present day. BC dates become larger the further away they get from the present day. The year AD 1 marks the birth of Christ in the Gregorian calendar.	• Describe the everyday lives of people from past historical periods. • Describe the roles of tribal communities and explain how this influenced everyday life. • Describe how past civilisations or lives of people in Britain developed during the Stone Age, Bronze Age and Iron Age. • Describe ways in which human invention and ingenuity have changed how people live. • Describe the achievements and influence of the ancient Greeks on the wider world. • Make choices about the best ways to present historical accounts and information. • Use historical terms to describe different periods of time. • Make deductions and draw conclusions about the reliability of a historical source or artefact. • Identify and discuss different viewpoints in a range of historical materials and primary and secondary sources. • Explain the similarities and differences between two periods of history. • Explain the cause and effect of a significant historical event. • Summarise how an aspect of British or world history has changed over time. • Describe how a significant event or person in British history changed or influenced how people live today. • Sequence dates and information from several historical periods on a timeline.
Computing	• Several pieces of software can be used together to complete one task, such as adding a video to a word processed document.	• Use a range of different software to successfully complete a project.
Design and Technology	• Key inventions in design and technology have changed	• Describe how key events in design and technology have shaped the world.
Art and Design		

Year 3 Term 6 - Knowledge and Skills

Curriculum Intent	*Challenge injustice and strive to live peacefully with others.*
Power of Reading Text	Rose Blanche
Cornerstones Unit	Mighty Metals
Companion project	N/A

	Knowledge	Skills
Science	• An object will not move unless a pushing or pulling force is applied. Some forces require direct contact, whereas other forces can act at a distance, such as magnetic force. • Results are information that has been discovered as part of an investigation. A conclusion is the answer to a question that uses the evidence collected. • Data can be recorded and displayed in different ways, including tables, charts, graphs and labelled diagrams. Data can be used to provide evidence to answer questions. • Questions can help us find out about the world and can be answered in different ways. • Equipment is used to take measurements in standard units. Examples include data loggers plus sensors, timers (seconds, minutes and hours), thermometers (°C) and metre sticks (millimetres, centimetres and metres). Taking repeat readings can increase the accuracy of the measurement. • Tests can be set up and carried out by following or planning a set of instructions. A prediction is a best guess for what might happen in an investigation based on some prior knowledge. • An observation involves looking closely at objects, materials and living things, which can be compared and grouped according to their features. • There are three different rock types: sedimentary, igneous and metamorphic. Sedimentary rocks form from mud, sand and particles that have been squashed together over a long time to form rock. Examples include sandstone and limestone. Igneous rocks are made from cooled magma or lava. They usually contain visible crystals. Examples include pumice and granite. Metamorphic rocks are formed when existing rocks are heated by the magma under the Earth's crust or squashed by the movement of the Earth's tectonic plates. They are usually very hard. Examples include slate and marble. • Some materials have magnetic properties. Magnetic materials are attracted to magnets. All magnetic materials are metals but not all metals are magnetic. Iron is a magnetic metal. • Magnets have two poles (north and south). Opposite poles (north and south) attract each other, while like poles (north and north, or south and south) repel each other. • Friction is a force between two surfaces as they move over each other. Friction slows down a moving object. Smooth surfaces usually generate less friction than rough surfaces.	• Explain that an object will not move unless a push or pull force is applied, describing forces in action and whether the force requires direct contact or whether the force can act at a distance (magnetic force). • Make working models with simple mechanisms or electrical circuits. • Use suitable vocabulary to talk or write about what they have done, what the purpose was and, with help, draw a simple conclusion based on evidence collected, beginning to identify next steps or improvements. • Gather and record findings in a variety of ways (diagrams, tables, charts and graphs) with increasing accuracy. • Ask questions about the world around them and explain that they can be answered in different ways. • Take measurements in standard units, using a range of simple equipment. • Set up and carry out some simple, comparative and fair tests, making predictions for what might happen. • Make increasingly careful observations, identifying similarities, differences and changes and making simple connections. • Compare and group rocks based on their appearance, properties or uses. • Compare and group materials based on their magnetic properties. • Investigate and compare a range of magnets (bar, horseshoe and floating) and explain that magnets have two poles (north and south) and that opposite poles attract each other, while like poles repel each other. • Compare how objects move over surfaces made from different materials.
Geography		
History		
Computing	• Text, images, animation, audio and video clips can be combined using tools within a piece of software or by using a range of software. For example, an image could be inserted into a word processing document or a video could be inserted into a presentation. • Several pieces of software can be used together to complete one task, such as adding a video to a word processed document. • Digital technology can be used for a range of purposes in different settings, such as using a tablet in the classroom to access educational material, in the home to access entertainment and in the community to share local news.	• Combine a range of text, images, animation and audio and video clips for given purposes. • Use a range of different software to successfully complete a project. • Use digital technology in different ways in the classroom, home and community.
Design and Technology	• Particular products have been designed for specific tasks, such as nail clippers, the spinning top and the cool box. • Electrical appliances must only be used under the supervision of an adult. Safety rules must also be followed when using electricity: fingers and other objects must not be put into electrical outlets, anything with a cord or plug should never be used around water and a plug should never be pulled out by its cord. • Levers consist of a rigid bar that rotates around a fixed point, called a fulcrum. They reduce the amount of work needed to lift a heavy object. Sliders move from side to side or up and down, and are often used to make moving parts in books. Axles are shafts on which wheels can rotate to make a moving vehicle. Cams are devices that can convert circular motion into up-and-down motion. • An electric circuit can be used in a model, such as a lighthouse. It can be controlled using a switch. • Design criteria are the exact goals a project must achieve to be successful. These criteria might include the product's use, appearance, cost and target user. • Shell structures are hollow, 3-D structures with a thin outer covering, such as a box. Frame structures are made from thin, rigid components, such as a tent frame. The rigid frame gives the structure shape and support. Diagonal struts can strengthen the structure. • Specific tools can be used for cutting, such as saws. Wood can be joined using glue, nails, staples, or a combination of these. Safety rules must be followed to prevent injury from sharp blades. These rules include using a bench hook to keep the wood still, using a junior hacksaw with a pistol grip and working under adult supervision. • Asking questions can help others to evaluate their products, such as asking them whether the selected materials achieved the purpose of the model. • Materials for a specific task must be selected on the basis of their properties. These include physical properties as well as availability and cost.	• Explain how an existing product benefits the user. • Use appliances safely with adult supervision. • Explore and use a range of mechanisms (levers, sliders, axles, wheels and cams) in models or products. • Incorporate a simple series circuit into a model. • Develop design criteria to inform a design. • Create shell or frame structures using diagonal struts to strengthen them. • Use tools safely for cutting and joining materials and components. • Suggest improvements to their products and describe how to implement them, beginning to take the views of others into account. • Plan which materials will be needed for a task and explain why.
Art and Design	• Visual elements include colour, line, shape, form, pattern and tone. • Suggestions for improving or adapting artwork could include aspects of the subject matter, structure and composition; the execution of specific techniques or the uses of colour, line, texture, tone, shadow and shading. • Malleable materials, such as clay, papier-mâché and Modroc, are easy to change into a new shape. Rigid materials, such as cardboard, wood or plastic, are more difficult to change into a new shape and may need to be cut and joined together using a variety of techniques.	• Use and combine a range of visual elements in artwork. • Make suggestions for ways to adapt and improve a piece of artwork. • Create a 3-D form using malleable or rigid materials, or a combination of materials.